TC/TG/MTG/TRG MINUTES COVER SHEET

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG No. TC 5.07 DATE June 24, 2019

TC/TG/MTG/TRG TITLE Evaporative Cooling

DATE OF MEETING June 24, 2019 LOCATION Kansas City, MO

<table>
<thead>
<tr>
<th>MEMBERS PRESENT</th>
<th>YEAR APPTD</th>
<th>MEMBERS ABSENT</th>
<th>YEAR APPTD</th>
<th>EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE</th>
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<tbody>
<tr>
<td>Steve Slayzak</td>
<td>2016</td>
<td>Sukru Erisgen</td>
<td>2016</td>
<td>Nicholas Lea</td>
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<td>William Truong</td>
<td>2017</td>
<td>Mike Scofield</td>
<td>2017</td>
<td>Andy Cochrane</td>
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<td>G.D. Mathur</td>
<td>2017</td>
<td>Vishnu Sreeram</td>
<td>2017</td>
<td>Chris Habets</td>
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<td>Richie Mittal</td>
<td>2016</td>
<td>David Baird</td>
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<td>Mark Miller</td>
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<td>Dave Binz</td>
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<td>Dennis Loveday</td>
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DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:

TAC Section Head: SHx@ashrae.net
Where x is the section number

All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.) See ASHRAE email alias list for needed addresses.

Mike Vaughn, Manager Of Research & Technical Services MORTS@ashrae.net
I. CALL TO ORDER
Steven Slayzak called the meeting to order at approximately 4:22 pm.

An attendance sign-in sheet was circulated and signed by those in attendance.

A roll call was held, three (3) of the seven (7) voting members were present to start the meeting.

There were not enough voting members so a quorum was not available to conduct business.

The minutes from the Atlanta ASHRAE TC-5.7 meeting were read but not approved as quorum was not available.

II. APPROVAL OF PREVIOUS MINUTES
A motion was made by GD to approve the minutes (2nd by William). The motion was carried.

(3) Approved (0) not approved (4) Not attending, (0) Abstentions

III. Chairs Report
- Steve would like get basecamp setup
  - **ACTION** – Steve to get base camp setup this week
  - Looking adding the design guide as a project
- Requested to get submissions for track 7 in Orlando – track explicitly created for section 5 – Ventilation and IAQ in air distribution systems
  - Requested by 5.10 (restaurants) to co-sponsor on evaporative cooling
    - Will work with them to put a presentation in
    - Deadline for submission is August 2nd
- ASHRAE would like to consolidate ~130 TC’s and SPCS, etc. into 30
  - Main driver is finding meeting space
  - Possible consolidation with TC 5.11 Humidifying Equipment
  - Steve to follow up by email

IV. Handbook (Mathur)
- Chapter 52 updated in latest handbook
- Chapter 41 submitted to ASHRAE for approval

V. Membership (Scofield)
• Sukru confirmed he will no longer be participating
  i. **ACTION** - Steve to work to get Sukru removed from voting member list and try to get more consistent voting members
• Mike was not in attendance Kansas City

VI. Programs (Slayzak)
• Good reviews for the seminar at the last conference
• Also sponsored a seminar with 7.7 – but had nothing to do with evaporative cooling. Not sure how that happened.

VII. Research (Mittal)
• **Ritchie was not present at this meeting (notes from previous meeting below)**
• Subcommittee discussed the possibility of an evaporative cooling design guide
  i. It could be done as either a research project or by working directly with ASHRAE publications (preferred route)
    1. TC 5.7 would have input on the team with potential royalties or compensation structure for meeting expenses
    2. The next step is to find a lead writer for the design guide
      • A subcommittee was formed to come up with an outline and call for writers
      • Design Guide Subcommittee is: Andy Cochrane (Chair), Mike Scofield, Nick Deschamps, Steve Slayzak & Pat Graef,
      • Ahmed Abdel-Salam (Nortek) would like to be involved as well
    3. Need to determine lead writer and generate a business case
      • ASHRAE publications
        i. Royalty structure
        • Need a primary author and scope defined (intentions and who’s going to buy it)
          i. Best practices
          ii. Controls
      • Subcommittee can review
    4. Richie will discuss with publications committee

VIII. Standard 133, 134, and 212 (Graef/Modera)
• Standard 212 is published and available in the bookstore now

IX. Website (Dwyer)
• **Annette was not present at this meeting, website status TBD**
• The website is up to date and agenda and meeting minutes are posted

X. Liaison Reports
• **TAC Section 5 chair Larry Smith**
  • All TC’s in section 5 have a Basecamp website setup
    o Just need to populate it with members
  • Challenge 2020
    o August 2\textsuperscript{nd} is the drop dead date for submissions for Orlando
  • Letter sent out in Basecamp
    o Consolidation/Reorganization proposal will not be happening based on feedback received from members
• Current MOP allows authority to consolidate, disband, change scope, etc.
• TAC is open to meetings to present or discuss issues
  • Just need to reach out to Larry to review first
• Send any feedback/questions/issues regarding TAC changes to Larry at sh5@ashrae.org
• 5.1, 5.2, 5.6, 5.9 have agreed to consolidate in section 5

XI. Old Business/ New Business
• TC 5.11 sponsored seminar 15
  i. 3 presentations
    1. Well-built for wellbeing
    2. Patients as bio-indicators
    3. Doing due diligence in research and data analysis
       • Steve Taylor proposed an additional ideal research project
       • Steve is chair of section 4.3
  ii. 5.11 is revising an RTAR for a project to align with Steve Taylor’s ideal project
    1. 2 year study
  iii. Several points in Steve’s presentation discussed the perceived idea that humidifiers cause hygiene risks
    1. Additional project could be how can a humidifier be implemented that alleviates these risks
       • Lower limit was removed from ASHRAE standards as a result of previous humidifier issues/installation
  iv. 5.11 will be submitting an additional RTAR after the first direct intervention health research
    1. Second RTAR will be for the hygiene
  v. Also possible addition to project to look at ROI for improved IAQ
• Dennis Loveday – Research liaison for section 5
  i. Helps with RTARs and getting these pushed through RAC

XII. Closing Remarks (Slayzak 2018-2020 Chair)
XIII. Next Meeting
• Orlando, FL: Monday (1/12/2019), 4:15 pm - 6:00 pm, Room: TBD
XIV. Adjournment

Meeting adorned at 4:57

A motion to adjourn the meeting was made by William and properly supported by GD. All members were in favor; none opposed.

(3) Approved  (0) not approved  (4) Not attending, (0) Abstentions

Meeting adjourned at 6:05 pm.